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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/595,647	06/16/2000	Alexander E. Mallet	MS150658.1	2603

27195	7590	09/02/2004

AMIN & TUROCY, LLP
24TH FLOOR, NATIONAL CITY CENTER
1900 EAST NINTH STREET
CLEVELAND, OH 44114

EXAMINER
BULLOCK JR, LEWIS ALEXANDER

ART UNIT	PAPER NUMBER
2126	

DATE MAILED: 09/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>20 July 2004</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
      closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-30</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-30</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
          application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2.   Claims 1, 7, 8, 15-18, 23-25, and 27-29 rejected under 35 U.S.C. 102(e) as being

anticipated by HANSON (U.S. Patent 6,546,425).

As to claim 1, HANSON teaches a system for parallel asynchronous command

execution, comprising: a first computer system (Mobile End System) for directing a call

to invoke a remote procedure (remote procedure call) in a second computer system

(Mobile Management System), the first computer and second computer communicating

via a non-persistent connection (via maintaining a continuous virtual connection even

though it may temporarily lose its physical connection to a specific network medium)

(col. 4, lines 3-17); wherein the second computer system (Mobile Management System)

upon completion of the remote procedure (request) generates an event trigger (event /

response message) and transmits the event trigger and remote procedure results

(response message disclosing whether the operations was successfully completed) to

the first computer system (Mobile End System) (col. 19, line 35 – col. 20, line 35; col.

23, lines 30-39).

As to claims 17, 23-25, and 27, refer to claim 1 for rejection.

As to claim 18, reference is made to a method that corresponds to the system of claim 1 and is therefore met by the rejection of claim 1 above.

As to claims 28 and 29, reference is made to a computer-readable medium that corresponds to the system of claim 1 and is therefore met by the rejection of claim 1 above.

As to claim 7, HANSON teaches a work item (work request) and a thread (main thread) for processing the remote procedure (RPC message) (col. 14, lines 14-48).

As to claim 8, HANSON teaches a completion event (TDI) on the second computer system for notifying the first computer system (col. 15, lines 7-30).

As to claim 15, HANSON teaches the second computer system further comprises a work interface for executing the remote procedure (via a TDI Remote Procedure Call engine) (col. 15, lines 7-30; col. 13, lines 10-39).

As to claim 16, HANSON teaches the request / responses have input / output attributes (parameters) (col. 13, lines 10-39) and that the interface executes the remote

procedure (via a TDI Remote Procedure Call engine) (col. 15, lines 7-30; col. 13, lines 10-39).

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 2-6, 9-14, 19-22, 26, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over HANSON (U.S. Patent 6,546,425).

As to claims 2, 3, and 9-14, HANSON teaches a computer environment wherein remote procedure calls are made from a first system to a second system that communicate over a non-persistent connection by using a remote procedure calling mechanism (col. 4, lines 3-17; col. 19, line 35 – col. 20, line 35; col. 23, lines 30-39; col. 7, line 29 – col. 8, line 48).   HANSON also teaches that the invention is limited to the disclosed embodiment (col. 39, lines 35-40). However, HANSON does not teach that the remote procedure calling mechanism is a distributed object architecture wherein an object interface uses various information, i.e a remote object identifier, a computer name identifier, arguments, and a user name, in communicating the request and response between objects. "Official Notice" is taken in that it is well known in the art that COM, DCOM, and Corba are well known remote procedure calling mechanism in an distributed object architecture that execute above the network protocol and wherein

the objects are able to communicate with other objects through object interfaces and by

embedding various information, i.e. a remote object identifier, a computer name

identifier, arguments, and a user name, into a remote procedure call embedded into a

network packet. Therefore, it would be obvious to one of ordinary skill in the art to

combine the teachings of HANSON with the well-known remote procedure calling

mechanism of COM, DCOM, and Corba in order to perform object communication in a

mobile network environment wherein the connection is non-persistent.

As to claims 4 and 6, HANSON teaches the first computer system (Mobile End

System) configures an event (response message) to receive the remote procedure

results from the second computer system (Mobile Management System) (via generating

a response message containing a message whether the operation was successfully

completed) (col. 19, lines 35 – col. 20, line 36). However, HANSON does not teach the

event contains an identifier. HANSON does teach that the response is sent back to the

peer system and that the overall environment contains a plurality of end systems

communicating with one another through a Mobil Management Server (col. 7, line 29 –

col. 8, line 48; col. 23, lines 30-39). Therefore it is obvious to one skilled in the art at the

time of the invention that in order to send a response to the correct system that sent the

request there must be an identifier in the response.

*As to claim 5, "Official Notice" is taken in that Windows Management

Infrastracture events are well known message events and therefore would be obvious to

one skilled in the art to use the particular type of event in the system of Hanson in order to send a response.

As to claims 19 and 20, reference is made to a method that corresponds to the system of claims 2 and 3 and is therefore met by the rejection of claims 2 and 3 above.

As to claims 21 and 22, reference is made to a method that corresponds to the system of claims 4 and 5 and is therefore met by the rejection of claims 4 and 5 above.

As to claim 26, refer to claim 4 for rejection.

As to claim 30, reference is made to a computer-readable medium that corresponds to the system of claim 4 and is therefore met by the rejection of claim 4 above.

Response to Arguments

5.   Applicant's arguments filed 7/20/04 have been fully considered but they are not persuasive. Applicant argues that Hanson does not teach a computer system that communicates via a non-persistent connection to invoke a remote procedure in a second computer system and upon completion of the remote procedure the second computer system generates an event trigger. The examiner disagrees. Hanson teaches first system (mobile end system) and a second system (Mobility Management

System) (see figure 1). Hanson teaches the first system communicates with the second

system via a non-persistent connection ("Mobile End Systems are sometimes but not

always actively connected to Mobility Management Server.", col. 7, lines 49-51; "Other

Mobile End Systems may communicate with Mobility Management Server via non-

permanent wire-based interconnects...", col. 7, line 66 – col. 8, line 6) to invoke a

remote procedure in a second system ("In the preferred embodiment, Mobility

Management Server communicates with Mobile End Systems using Remote Procedure

Call and Internet Mobility Protocols...", col. 7, lines 43-48; "Mobile interceptor in the

preferred embodiment thus supports Remote Procedure Call protocol and Internet

Mobility Protocol to connect Mobility Management Server to each Mobile End System.

Remote procedure calls provide a method for allowing a process on a local system to

invoke a procedure on a remote system.", col. 12, lines 33-44; "The Remote Procedure

Call protocol engine on Mobile End System marshals TDI call parameters, formats the

data, and sends the request to the Internet Mobility Protocol engine for forwarding to

Mobility Management Server where the TDI Remote Procedure Call engine executes

the calls.", col. 13, lines 10-30). Hanson teaches upon completion of the remote

procedure the second computer system (Mobility Management Server) generates an

event trigger ("Mobility Management Server RPC engine completes RPC transactions

that are executed by the RPC dispatcher. Not all RPC calls require a response on

successful completion. Those RPC calls that do require responses on successful

completion cause the RPC dispatcher to build the appropriate response and post the

response to the Internet mobile Protocol engine to be returned to the peer Mobile End

System. All RPC calls generate a response when the RPC call fails...", col. 19, lines

36-53). Hanson also teaches commands execute asynchronous ("These are RPC

messages that are generated asynchronously...", col. 19, lines 41-43) and in parallel

("For performance purposes RPC engine may provide a look ahead mechanism during

the parsing process of the RPC messages to see if it can execute some of the

requested transactions concurrently.", col. 14, lines 34-40). Therefore, Hanson teaches

the cited limitations as disclosed. Applicant argues that the Mobile End System and the

Mobile Management System of Hanson effectively comprise a single computer system

since the one is acting in lieu of the other. The examiner disagrees. Figures 1 and 2

clearly teaches that the two systems are distinct from one another and communicate

over a LAN, WAN, or other transport protocol, one of which is non-permanent.

Applicant then argues that the Fixed End System is generating the event and not the

Mobile Management System. The examiner disagrees. Hanson teaches that the

Mobility Management Server RPC engine supports RPC events and RPC receive

responses (col. 19, lines 38-41). Hanson also teaches the RPC dispatcher of the

Mobile Management System builds an appropriate response and post the response to

the Internet Mobile Protocol engine to be returned to the peer Mobile End System (col

.19, lines 47-51; col. 19, lines 9-13). In addition, Hanson teaches that the proxy server

can accept request on behalf a Mobile End system such as a connect request wherein

the Server, i.e. the Mobility Management Server, builds a connect event RPC call and

forwards it to the Mobile End System. Therefore, the Mobile Management System

generates an event and response message as a result of the execution of a remote

procedure call as disclosed above. Therefore, the rejections are maintained as

disclosed above.

Conclusion

6.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

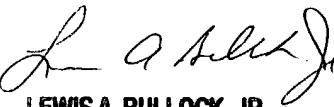than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Lewis A. Bullock, Jr. whose telephone number is (703)

305-0439. In mid-October the examiner can be contacted at (571) 272-3759. The

examiner can normally be reached on Monday-Friday, 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Meng An can be reached on (703) 305-9678. In mid-October, the

examiner's supervisor can be reached on (571) 272-3756. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

August 27, 2004

LEWIS A. BULLOCK, JR.
PRIMARY EXAMINER